

Appl. No. 09/903,366
Amdt. Filed August 23, 2005
Reply to Office action of August 16, 2005
Attorney Docket No. P13692-US2
EUS/JP/05-1214

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 4. (Cancelled)

5. (Currently Amended) A method of detecting a faulty path in a communication network having a control-plane entity and a user-plane entity, comprising the steps of:

sending, from the control-plane entity to the user-plane entity, an event in accordance with a media gateway control protocol, wherein the event orders the user-plane entity to notify the control-plane entity when the user-plane entity discovers [[a]] the faulty path;

sending at least one heartbeat message through the path;

determining whether [[a]] one of said at least one heartbeat acknowledgment message has been received through the path; and

if [[a]] one of said at least one heartbeat acknowledgment message has not been received, notifying the control-plane entity of the faulty path.

6. (Original) The method of claim 5, further comprising the step of sending, from the control-plane entity to the user-plane entity, a signal in accordance with the media gateway control protocol, wherein the signal orders the user-plane entity to send heartbeat messages through the path.

7. (Original) The method of claim 5, wherein the communication network provides general packet radio service.

8. (Original) The method of claim 5, wherein the communication network is a circuit-switched network using packet bearers.

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9. (Currently Amended) A method of detecting a re-started user-plane peer in a communication network having a control-plane entity and a user-plane entity, comprising the steps of:

sending, from the control-plane entity to the user-plane entity, an event in accordance with a media gateway control protocol, wherein the event orders the user-plane entity to notify the control-plane entity when the user-plane entity discovers a re-started user-plane peer;

sending successive heartbeat messages to a user-plane peer;

receiving successive heartbeat acknowledgment messages from the user-plane peer, wherein the heartbeat acknowledgment messages include re-start counter values;

comparing re-start counter values of successive pairs of received heartbeat acknowledgment messages from [[a]] the user-plane peer; and

if the comparison indicates that the user-plane peer has been re-started, notifying the control-plane entity of the re-started user-plane peer.

10. (Original) The method of claim 9, further comprising the step of sending, from the control-plane entity to the user-plane entity, a signal in accordance with the media gateway control protocol, wherein the signal orders the user-plane entity to send heartbeat messages to the user-plane peer.

11. (Original) The method of claim 9, wherein the communication network provides general packet radio service.

12. (Original) The method of claim 9, wherein the communication network is a circuit-switched network using packet bearers.
